Figure 1

MPGIVVFRRRWSVGSDDLVLPAIFLFLLHTTWFVILSVVLFGLVYNPHEACSLNLVDHGRGYLGILLSCMIAEMA

IIWLSMRGGILYTEPRDSMQYVLYVRLAILVIEFIYAIVGIVWLTQYYTSCNDLTAKNVTLGMVVCNWVVILSVC

ITVLCVFDPTGRTFVKLRATKRRQRNLRTYNLRHRLEEGQATSWSRRLKVFLCCTRTKDSQSDAYSEIAYLFAEF

FRDLDIVPSDIIAGLVLLRQRQRAKRNAVLDEANNDILAFLSGMPVTRNTKYLDLKNSQEMLRYKEVCYYMLFAL

AAYGWPMYLMRKPACGLCQLARSCSCCLCPARPRFAPGVTIEEDNCCGCNAIAIRRHFLDENMTAVDIVYTSCHD

AVYETPFYVAVDHDKKKVVISIRGTLSPKDALTDLTGDAERLPVEGHHGTWLGHKGMVLSAEYIKKKLEQEMVLS

QAFGRDLGRGTKHYGLIVVGHSLGAGTAAILSFLLRPQYPTLKCFAYSPPGGLLSEDAMEYSKEFVTAVVLGKDL

VPRIGLSQLEGFRRQLLDVLQRSTKPKWRIIVGATKCIPKSELPEEVEVTTLASTRLWTHPSDLTIALSASTPLY

PPGRIIHVVHNHPAEQCCCCEQEEPTYFAIWGDNKAFNEVIISPAMLHEHLPYVVMEGLNKVLENYNKGKTALLS

AAKVMVSPTEVDLTPELIFQQQPLPTGPPMPTGLALELPTADHRNSSVRSKSQSEMSLEGFSEGRLLSPVVAAAA

RQDPVELLLLSTQERLAAELQARRAPLATMESLSDTESLYSFDSRRSSGFRSIRGSPSLHAVLERDEGHLFYIDP

AIPEENPSLSSRTELLAADSLSKHSQDTQPLEAALGSGGVTPERPPSAAANDEEEEVGGGGGGPASRGELALHNG

RLGDSPSPQVLEFAEFIDSLFNLDSKSSSFQDLYCMVVPESPTSDYAEGPKSPSQQEILLRAQFEPNLVPKPPRL

FAGSADPSSGISLSPSFPLSSSGELMDLTPTGLSSQECLAADKIRTSTPTGHGASPAKQDELVISAR
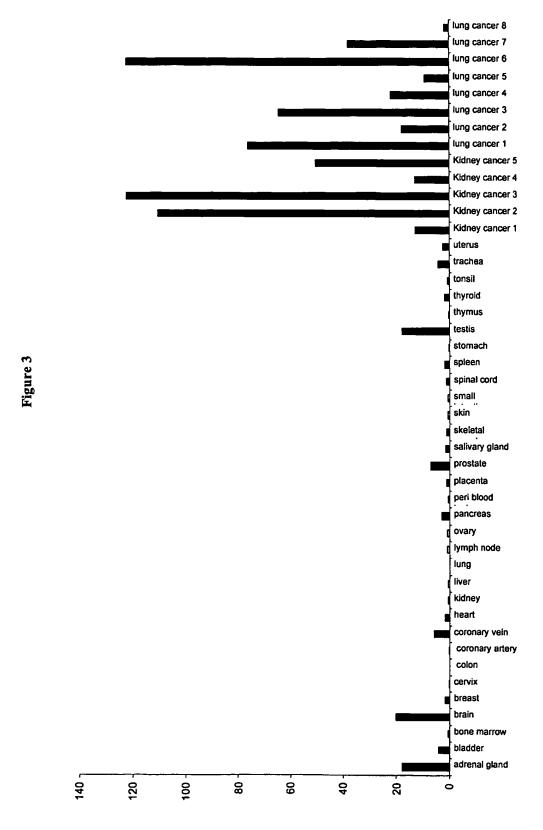
Figure 2

```
   1 ggccttgggg agcccaggat ggaggtggcg gtcgcggcgg cgggccgagc cctgcggcgg
  61 gcgggaggag gtgagcacca ggcccactga gcctctgcag agccaccagc catgcccggg
 121 atcgtggtgt tccggcggcg ctggtctgtg ggcagtgatg acctcgtcct accagccatc
 181 ttcctctttc tcctgcatac cacctggttt gtgatcctgt ccgtggtgct cttcggcctg
 241 gtctataacc cgcacgaggc ctgctccctg aacctggtgg accacggccg cggctacctg
 301 ggcatcctgc tgagctgcat gatcgctgag atggccatca tctggctgag catgcgcggg
 361 ggcatcctct acacggagcc ccgtgactcc atgcagtacg tgctctacgt gcgcctggcc
 421 atcctggtga tcgagttcat ctacgccatc gtgggcatcg tctggctcac tcagtactac
 481 acctcctgca acgacctcac tgccaagaat gtcaccctcg gaatggttgt ctgcaactgg
 541 gtagtcatcc tcagtgtgtg catcactgtc ctctgcgtct tcgaccccac gggccgcacc
 601 tttgtcaagc tgagagccac caagaggagg cagcgtaacc tgcggaccta caacctgcgg
 661 caccgcttag aggagggtca agccaccagc tggtcgcgcc ggctcaaagt gttcctctgc
 721 tgcacgcgga cgaaggactc ccagtcagat gcctactcag aaatcgccta cctctttgcg
 781 gagttcttcc gggaccttga cattgtgcca tccgacatca ttgctggcct ggtgctgctc
 841 cggcagcggc agcgggccaa gcgcaacgcc gtgctggacg aggcaaacaa tgacatcttg
 901 gccttcctgt ctgggatgcc ggtgaccaga aacaccaagt acctcgacct caagaattca
 961 caagagatgc tccgctacaa agaggtctgc tactacatgc tctttgccct ggctgcctac
1021 gggtggccca tgtacctgat gcggaagccc gcctgcggcc tctgccaact ggctcggtcc
1081 tgctcgtgtt gcctgtgtcc tgcgaggccg cggttcgccc ctggagtcac catcgaggaa
1141 gacaactgct gtggctgtaa tgccattgcc atccggcgcc acttcctgga cgagaacatg
1201 actgcggtgg acatcgtcta tacctcctgc catgatgcgg tctatgaaac gcccttctac
1261 gtggcggtgg accatgacaa gaagaaagtg gtgatcagta tccgggggac cctgtccccc
1321 aaggatgccc tgactgacct gacgggtgat gctgagcgcc tccccgtgga ggggcaccac
1381 ggcacctggc tgggccacaa gggtatggtc ctctcagctg agtacatcaa gaagaaactg
1441 gagcaggaga tggtcctgtc ccaggccttt gggcgagacc tgggccgcgg aaccaaacac
1501 tacggcctga ttgtggtggg ccactccctg ggcgcgggca ctgctgccat cctctccttc
1561 cttctgcgcc cacagtatcc gaccctcaag tgctttgcct actccccgcc agggggcctg
1621 ctgagtgagg atgcaatgga gtattccaag gagttcgtga ctgctgtggt tctgggcaaa
1681 gacctcgtcc ccaggattgg cctctctcag ctggaaggct ccgcagaca gctcctggat
1741 gtcctgcagc gaagcaccaa gcccaaatgg cggatcatcg tggggccac caaatgcatc
1801 cccaagtcgg agctgcctga ggaggtagag gtgaccaccc tggccagcac gcggctctgg
1861 acccacccca gcgacctaac tatagcccct tcagccagca ctccactcta cccgcccggc
1921 cgcatcatcc acgtggtcca caaccaccct gcagagcagt gctgctgctg tgagcaggag
1981 gagcccacat actttgccat ctggggcgac aacaaggcct tcaatgaggt gatcatctcg
2041 ccagccatgc tgcatgagca cctgccctat gtggtcatgg aggggctcaa caaggtgctg
2101 gagaactaca caaggggaa gaccgctctg ctctctgcag ccaaggtcat ggtgagccct
2161 accgaggtgg acctgactcc tgagctcatc ttccagcagc agccactccc cacggggccg
2221 cccatgccca ctggccttgc cctggagctg ccgactgcag accaccgcaa cagcagcgtc
2281 aggagcaagt cccagtctga gatgagcctg gagggcttct cggaggggcg gctgctgtcg
2341 ccagtggttg cggcggcggc ccgccaggac ccggtggagc tgctgctgct gtctacccag
2401 gagcggctgg cggcggagct gcaggcccgg cgggcaccac tggccaccat ggagagcctc
2461 tcggacactg agtccctgta cagcttcgac tcgcgccgct cctcaggctt ccgcagcatc
2521 cggggctccc ccagcctcca cgctgtgctg gagcgtgatg aaggccacct cttctacatt
2581 gaccctgcca tccccgagga aaacccatcc ctgagctcgc gcactgagct gctggcggcc
2641 gacagcctgt ccaagcactc acaggacacg cagcccctgg aggcggccct gggcagtggc
2701 ggcgtcactc ctgagcggcc ccccagtgct gcggccaatg acgaggagga gaggttggc
2761 ggtggggtg gcgggccggc ctcccgcggg gagctggcgc tgcacaatgg gcgcctgggg
2821 gactcgccca gtcctcaggt gctggaattc gccgagttca tcgacagcct cttcaacctg
2881 gacagcaaga gcagctcctt ccaagacctc tactgcatgg tggtgcccga gagcccca cc
```

Figure 2 (continued)

```
2941 agtgactacg ctgagggccc caagtccccc agccagcaag agatcctgct ccgtgcccag
3001 ttcgagccca acctggtgcc caagccccca cggctctttg ccggctcagc cgacccctcc
3061 tcgggcatct cactctcgcc ctccttcccg ctcagctcct cgggtgagct catggacctg
3121 acgcccacgg gcctcagtag ccaggaatgc ctggcggctg acaagatccg gacttctacc
3181 cccactggcc acggagccag ccccgccaag caagatgagc tggtcatctc agcacgcTAG
3241 caccccagtt gcgtggccag ccgggcccag gcaggagcag gtggccctgt gggcacctgg
3301 tgcctgcccc ctgccgggca gctttaagga cagaccccca ggggcagttt agcctcaggc
3361 acaggcatcg ctgctgagct gggggtccgc atccctacct cagcttagga cccccagagc
3421 caaggtggct gggatctggc cccacagatg gggaaagatg gggaagggtg tggagtgggg
3481 aggagcctgg gcagcctgct gggtgggcca cactcagcct gactgccctc catgggggca
3541 ttctggcacc ccctgctcca ggacaggcca tgggcaagct gcctcccatc actgcctgct
3601 ggctgctctc ccaggggcca ggtgtgaaga gcagtgcccc ccgacacatg tattctcatc
3661 tgtggtccag gccggcatcg tcctggccac cccccagatc tggtgcctgc tggccggccc
3721 cctggggtgc ccctgccgag gtggcctgca gtgctgtaca tgtttacaga agctgctggg
3781 cttggctcag gatgtgttct gggcttgcaa gcccccccgcc caatcatgtg ttcagtagcc
3841 gtcctctgag cagggcccaa ggcagccagg ggcctggagg ggccagagga gggtggggtc
3901 agggccgccc cttctctgcc ttgtgcctct catgctgcct cctctgccca tgggtcctgg
3961 gcacccaggc ctgccctgcc tgctggctac ttcctggctt accttctacc cccaaggatc
4021 ctcaccaccc aaagggtggt gggcactgct gtgaccaccc cagctgcaga gtcagtgccc
4081 tgggtggaag gaaggcactg agagccccct tcctctgagg gccccacctc accccttggt
4141 gtcacccccca ccacgcctag gcagctctgg gccctgggat ctggaaccaa cacacccctg
4201 ttcccctcag ctttcccccc tcc tcgctggcct gggcaccctc ctgggagcag gccttcctcc
4261 ctcccacccc caatgtcctg ttggtaggag gtggggccaa gagtggggta tggtgggcct
4321 tggctggaga cctctgtcca ctgcccaggg aggggcctgg ggctgggagc agtcccggtt
4381 tagcctgagg tccccatagg gcttcctccc ctgctgggtt tgggaagcag ttaggagat
4441 agcgacccgg agtttcccca gaagcggggt gggagggtgt gcatgctagt gttggcgcgt
4501 atgcatgtgc atgagtgtgc accgttccta aggaaggggc ctctggggct gcccacccta
4561 cctgccctgc ctgcctgctg cccctcccag cctgccaaga aaacggtagg ggagcatgat
4621 ggggcctttg aggcagggtc gcagggacaa gctcagcttt aggcaccatc tgttcccatc
4681 acgcctgctg ctgtgacccg ttttggaaaa ctggtgtgta ccgaggcgct gactgcacgg
4741 ctgaccgcct gctcgtgcct tcattctgca gcggcatggt ccctcccatt ctggctccac
4801 ctgcagcctc cctgggtggc ctaggctccc ccgaccaaga gacctccctc tcatgatcac
4861 tggtacctgg gggcctgaat tctggccccc ggctccccac acagctggga ctggcctgga
4921 tggctgtcct gggagccccct gcccaccctg acggagctgg gcctcccctc atcctctgta
4981 actcccgcct tcaccagact caaggacacc ctggccctgc tgaggcatac agagcttcag
5041 cccagcacag aagcaagaca aaatcagtgg ctcttagagt ttagaaaaca agacagactc
5101 tcagatgaaa gatctgacaa gcaccgtggc cagtcacagg gagagacttg atgtctggcc
5161 ttttaattcc tcctctgcca gggtgggtcc tgggacctct aatgtgggca tgtcgtccac
5221 cccaggacga gccatcaggg acagaccccc cacccccaag gctgcagcca caccatgttt
5281 caggcttggg gctggggcag gcttgggctc aatcctgggc acccagggc agcccacccc
5341 taacctggct cctacccacc ttgcccttga aggatgggcc tgctgcacgt ctccctcctc
5401 caccccatac cacactgggg ggtctgagcc acccccctca gccccgttcg gctcagaccg
5461 accccactc catccccaga cctgcagcac aagtgcgcgg gcctgtcctc ccaggggcct
5521 gggcgactcc atatgcaatc agtagcgagc agccgggccc cacagaccct catgcactct
5581 cttacgtgcc attctcccca gactttttttt gtacttaatg tatgaaagat ccaaactaat
5641 attgctgtaa aaaggagaga caaattaata tagcttattc tataaat
```

Figure 3